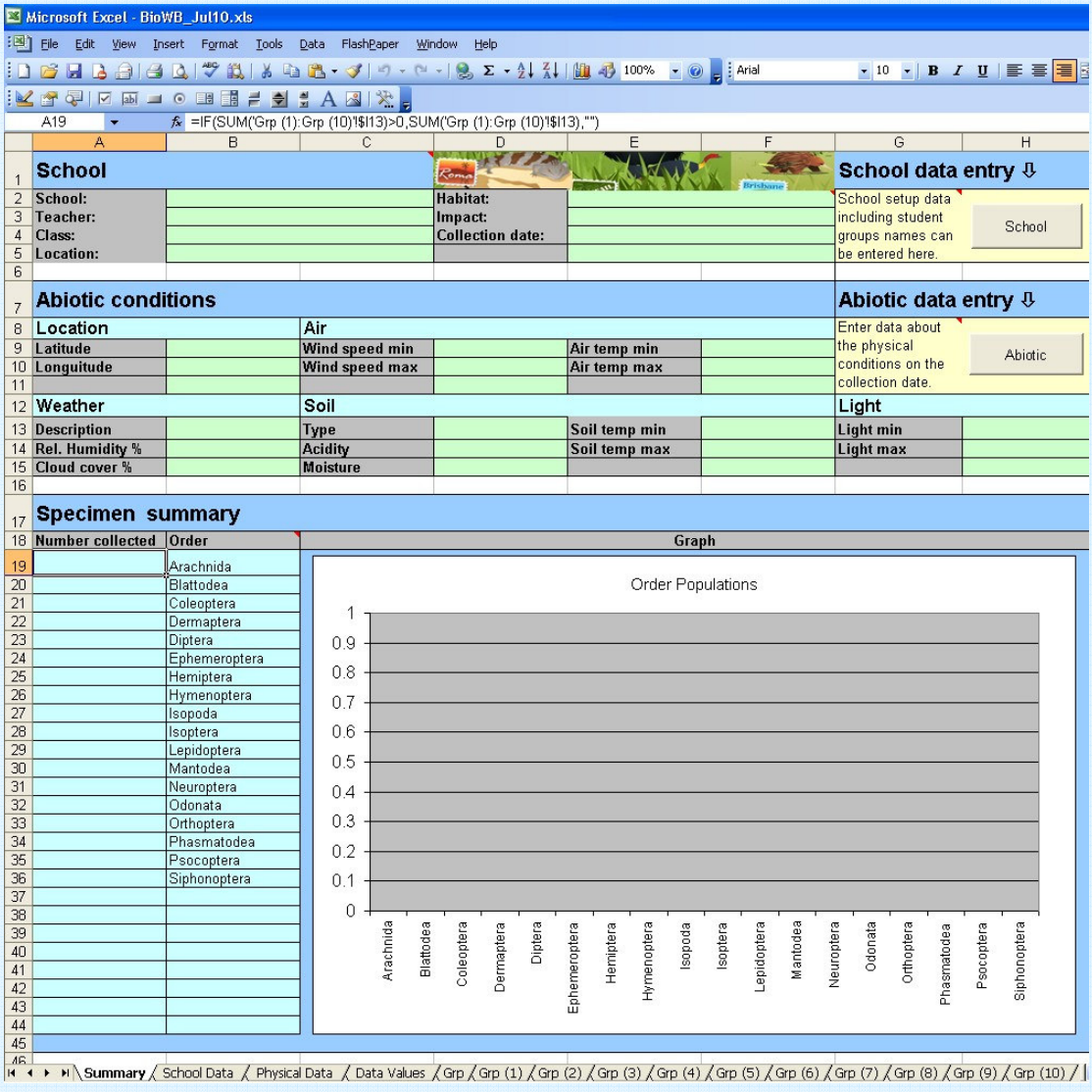
Data collation tool

User manual



Contents

Contents 2
Data collation sheet 3
User Manual 3
    Introduction 3
    Installing the software 3
    Using the software 3
    Using the data sheets 3
Summary data sheet 4
    Purpose: 4
    Function: 4
    Users: 4
    Operation: 4
    Troubleshooting: 4
School data sheet 6
    Purpose: 6
    Function: 6
    Users: 6
    Operation: 6
    Troubleshooting: 6
Physical data sheet 7
    Purpose: 7
    Function: 7
    Users: 7
    Operation: 7
    Troubleshooting: 7
Data values sheet 8
    Purpose: 8
    Function: 8
    Users: 8
    Operation: 8
    Troubleshooting: 8
Grp sheet 9
    Purpose: 9
    Function: 9
    Users: 9
    Operation: 9
    Troubleshooting: 9
Grp() data sheets 10
    Purpose: 10
    Function: 10
    Users: 10
    Troubleshooting: 11
Data flow diagram 13

Data collation sheet

User Manual

Introduction

- This data collation tool (spreadsheet) provides a means to handle all the data for a collection event.
- The user manual
  - Scope/Purpose

  The user manual provides guidance for administrators in using and maintaining the data tool.

  There is a guide for each worksheet that includes details on:
  - Purpose
  - Function
  - Users
  - Operation
  - Troubleshooting

Installing the software

- System requirements
  - Capability to run Microsoft Excel 2003.
  - Platform Support

    The Excel spreadsheet has been developed for Windows XP Office 2003 in a VB.net environment.
  - Apple OS

    Apple OS may **not** support all macro or VB Code functions.
- Installation steps
  - Copy Excel spreadsheet to suitable folder for user access.
  - Copy the file under a new name for this collection event.
  - Use a suitable format for name: ourCollectionEvent_Jul_2010.xls
  - This is NOT a network solution so **one user access** at a time is allowed.

Using the software

- Introduction
  - Purpose of the software: The software provides a means to collate and analyse data from a single collection event at a single site. Multiple collection events and sites will require separate data workbooks.
  - User levels and the implications:

    Administrators:
    - Enter school and physical data through forms (School and Abiotic)
    - Update data values that appear in drop down lists
    - Copy and create new data sheets if required

    Users:
    - Enter data in group data sheets
- Limitations:
  - Best viewed in 1680x1050 resolution
  - Limited to **100 data entry records** per group.

Using the data sheets

- Summary
- School
- Physical
- Data values
- Grp
- Grp()

Summary data sheet

Purpose:

- To display all relevant data collected by the whole group in a form ready for analysis.

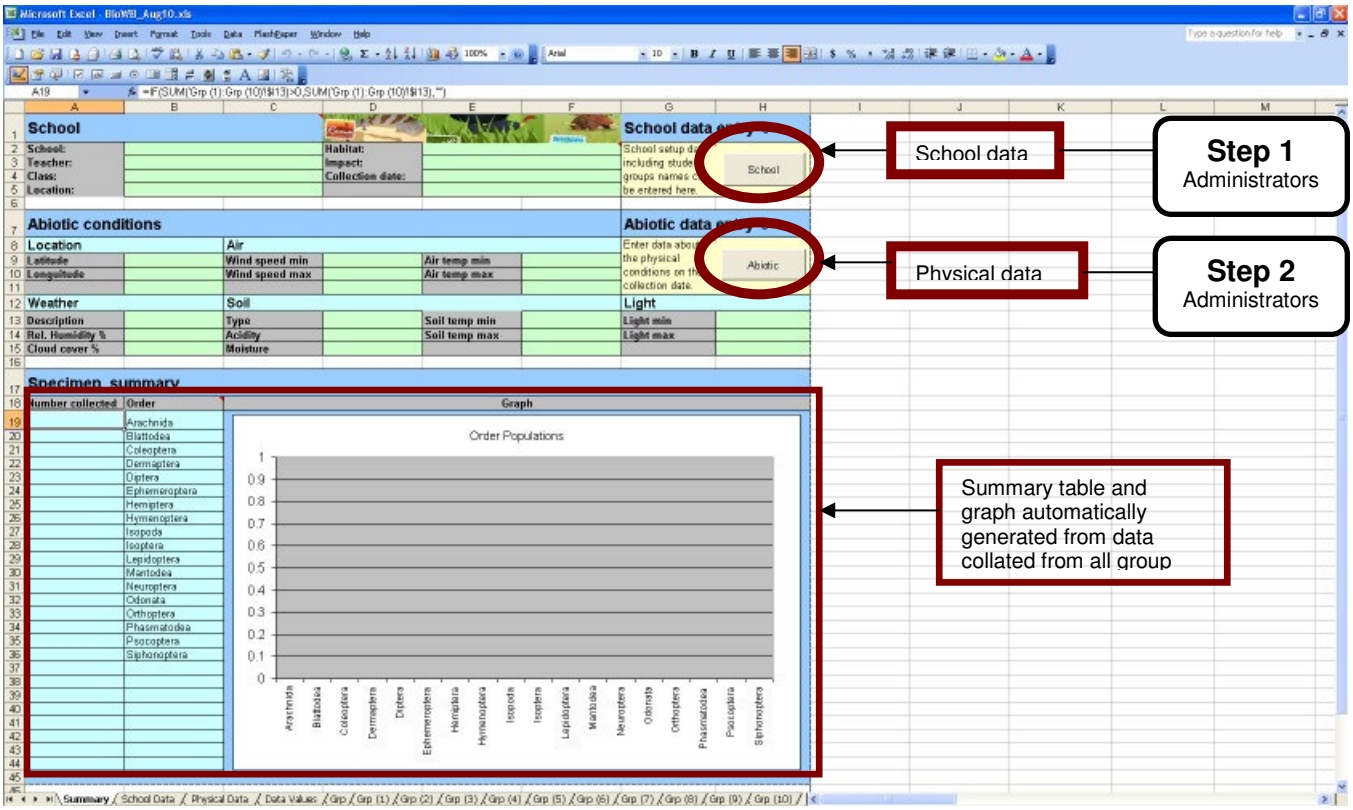
Function:

- All data is inputted using the forms for School data and Abiotic (physical) data.
- Specimen data is automatically generated from the group data sheets
- Cells are locked so that all data is only entered through the forms or the automatic functions.

Users: Administrators

- Administrators should only enter data through the two form buttons: *School* and *Abiotic* (physical)
- The worksheet is protected but can be changed by teachers (no password required)

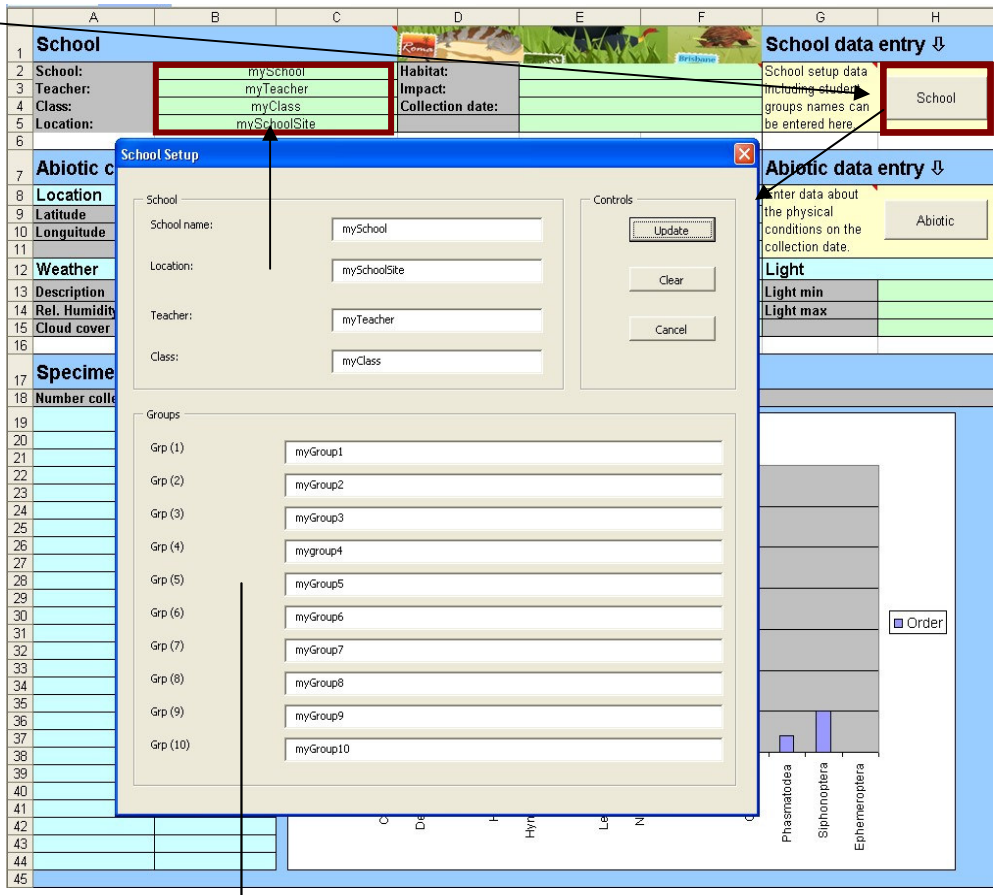
Operation:



Troubleshooting:

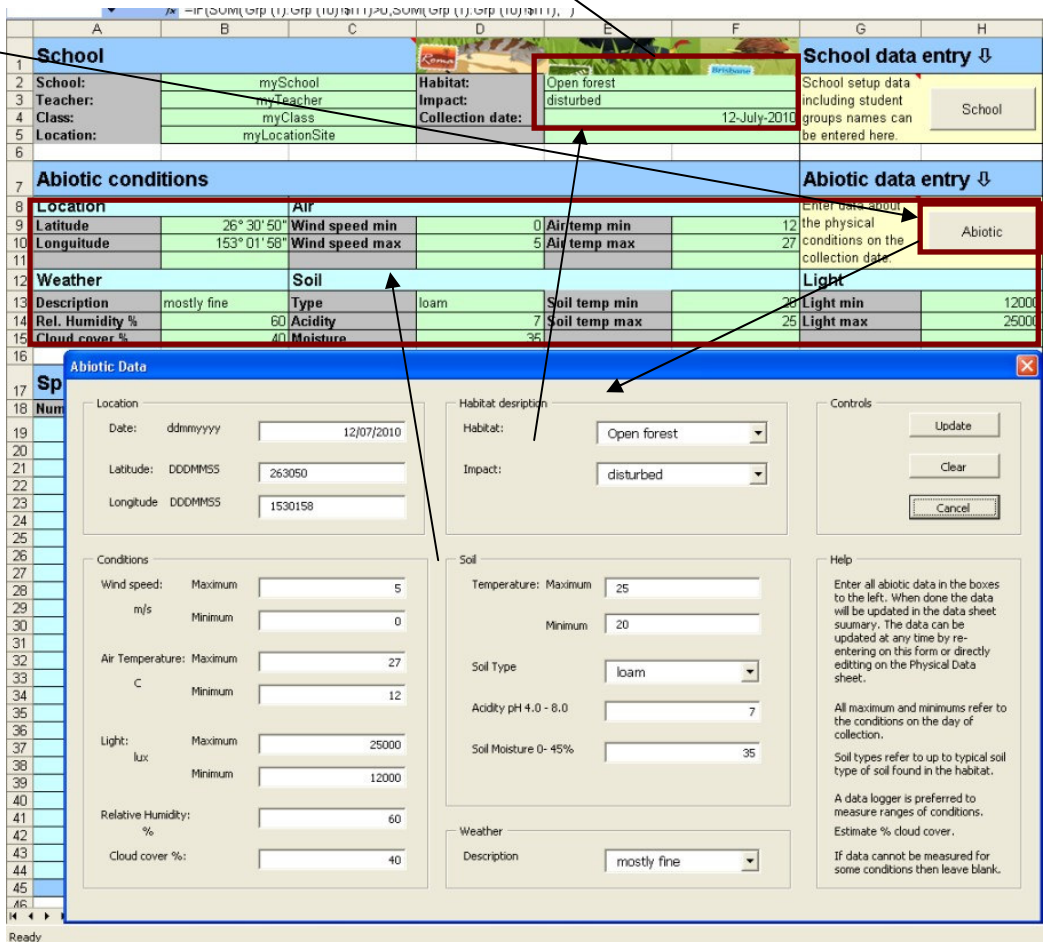
- If the forms do not function due to operating system incompatibilities (Apple), then all data can be directly entered into the Physical Data and School Data sheets as described in the relevant data sheet sections.
- The summary sheet will still function correctly once data has been entered into the Physical and School Data sheets.
- If date displays as US format then check settings in Control panel => Regional and Language Options => Customise… => Date tab => Short Date format: dd/mm/yyyy.

Step 1
Administrators



Group data sheets

Step 2
Administrators



School data sheet

Purpose:

- To store all school data relating to the collection event.

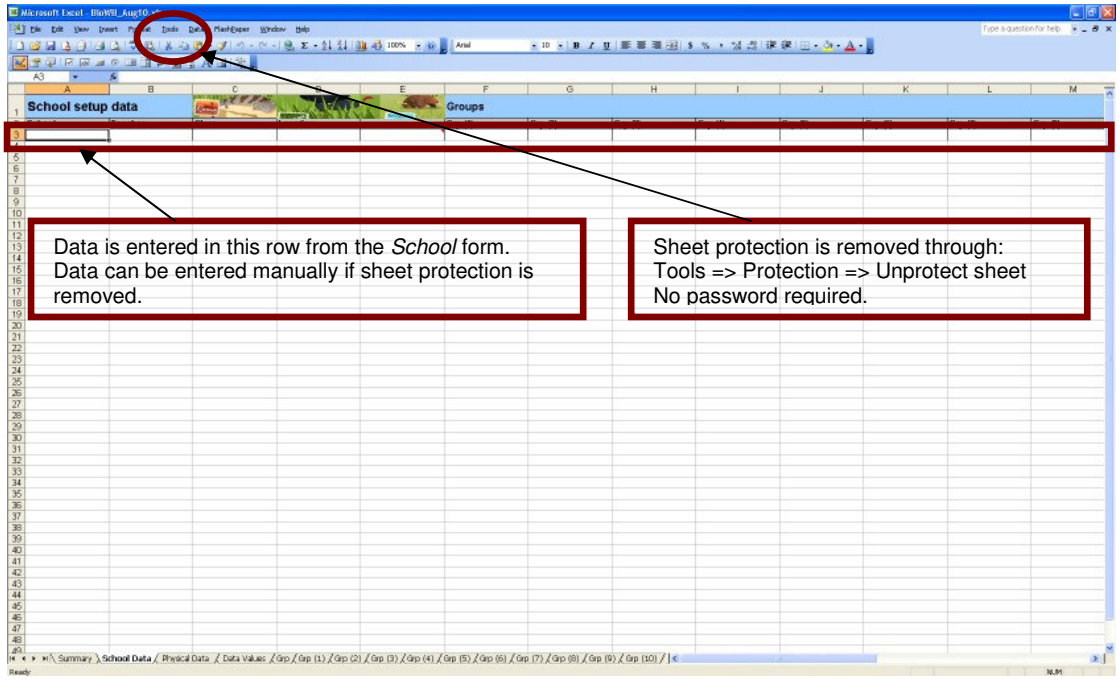
Function:

- All data is entered automatically from the *School* form accessed on the Summary sheet.
- All data is automatically copied back to the summary page for display.
- Cells are locked but can be unprotected if direct editing is required.

Users: Administrators

- Administrators should only edit this sheet if required (trouble with School form operation)
- Normally no user interaction is required.

Operation:


School setup data
Groups
Data is entered in this row from the *School* form.
Data can be entered manually if sheet protection is removed.
Sheet protection is removed through:
Tools => Protection => Unprotect sheet
No password required.

Troubleshooting:

- Enter data directly into the first row if there are problems with the functioning of the *School* form on the Summary sheet. This may occur for Apple OS users … sorry.

Physical data sheet

Purpose:

- To store data relating to the abiotic (physical) conditions on the day of the collection event.

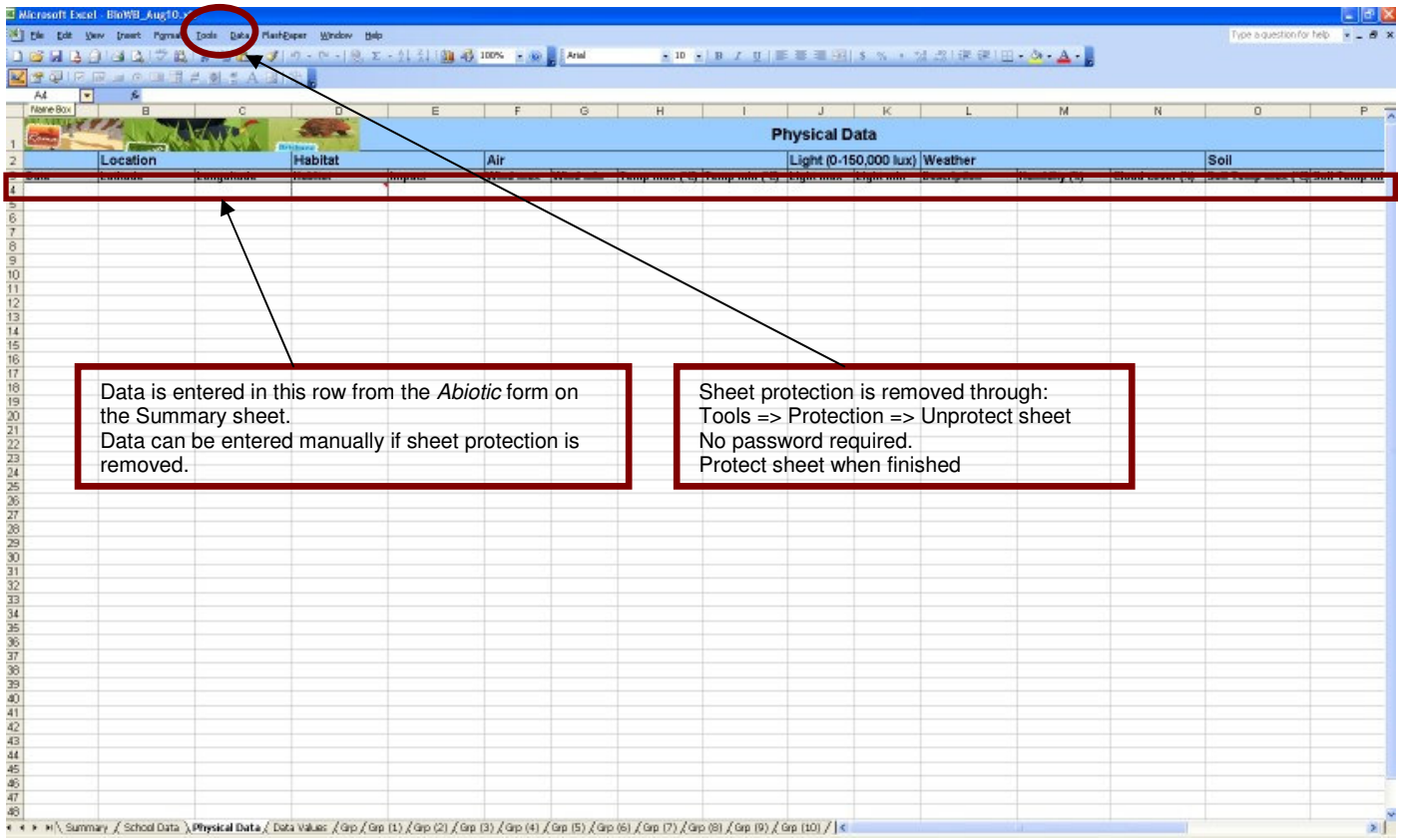
Function:

- All data is entered automatically from the *Abiotic* form accessed on the Summary sheet.
- All data is automatically copied back to the summary page for display.
- Cells are locked but can be unprotected if direct editing is required.

Users: Administrators

- Administrators should only edit this sheet if required (trouble with Abiotic form operation)
- Normally no user interaction is required.

Operation:


Physical Data
Location
Habitat
Air
Light (0-150,000 lux)
Weather
Soil
Data is entered in this row from the *Abiotic* form on the Summary sheet.
Data can be entered manually if sheet protection is removed.
Sheet protection is removed through:
Tools => Protection => Unprotect sheet
No password required.
Protect sheet when finished

Troubleshooting:

- Enter data directly into the first row if there are problems with the functioning of the *Abiotic* form on the Summary sheet.

Data values sheet

Purpose:

- To store all data that appears in the drop down boxes or is required for automatic functions.

Function:

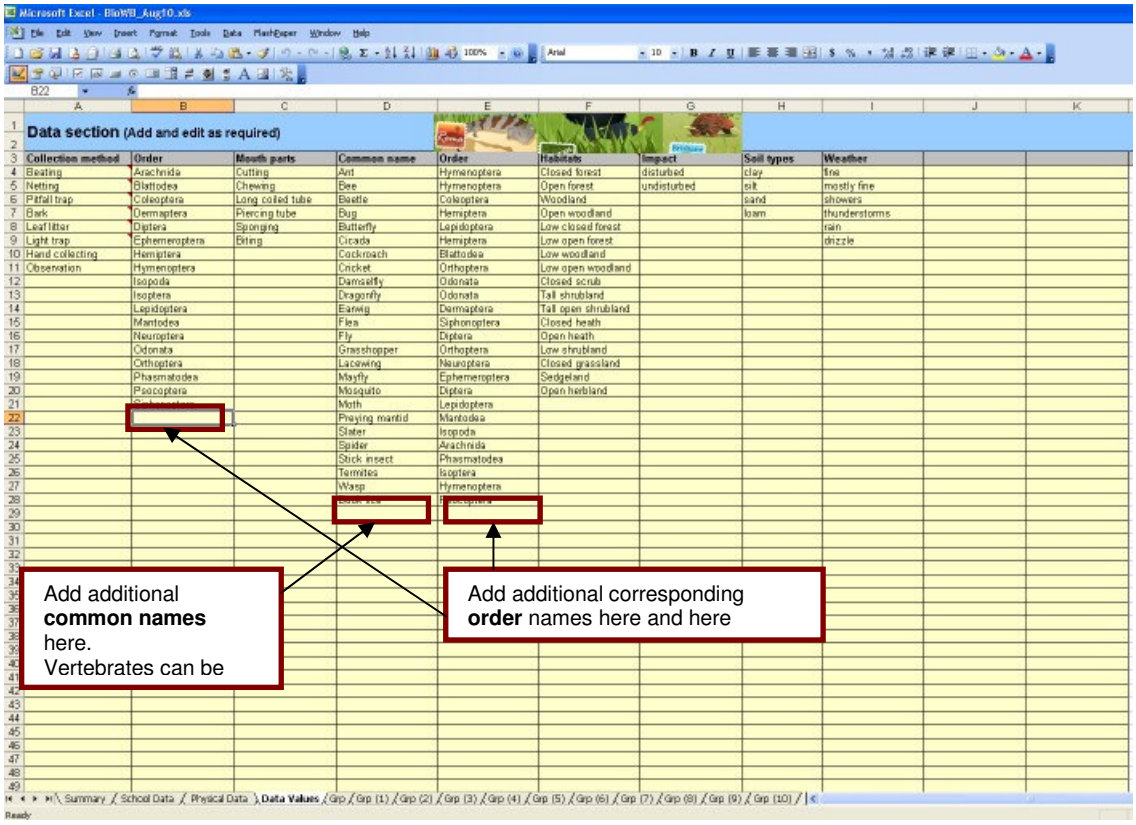
- Data can be edited directly into cells as required. There is no form for editing functions.
- Sheet is protected to prevent user misadventures but the administrator can unprotect the sheet to make editing changes:
    - Tools => Protection => Unprotect
    - No password required
    - After editing protect again
- There is no practical limit to the number of entries as data is automatically read to the bottom of each column.

Users: Administrators

- Administrators should only edit this sheet if required (trouble with Abiotic form operation)
- Normally no user interaction is required.

Operation:

Step 3
Administrators


Data section (Add and edit as required)
Add additional **common names** here. Vertebrates can be
Add additional corresponding **order** names here and here

Troubleshooting:

- If the **Common Name** column is resorted to alphabetical order, then the **Order** column must also be selected to sort.
- **Order names** should only appear **once** in Column B but can occur on multiple occasions Column E. If you add a new common name animal and its corresponding order next to it then only add the order name to Column B if it doesn't already exist in that column.

Grp sheet

Purpose:

- To provide a clean copy of the group data sheets if **replacement** copies required.

Function:

- This sheet should not be used to enter data; its only use is for copying purposes.
- Creation of **additional** copies of the group data sheet will require:
    - Creating additional lists for the automated graphing functions to work
    - Editing of Summary sheet formulae to include additional sheet data

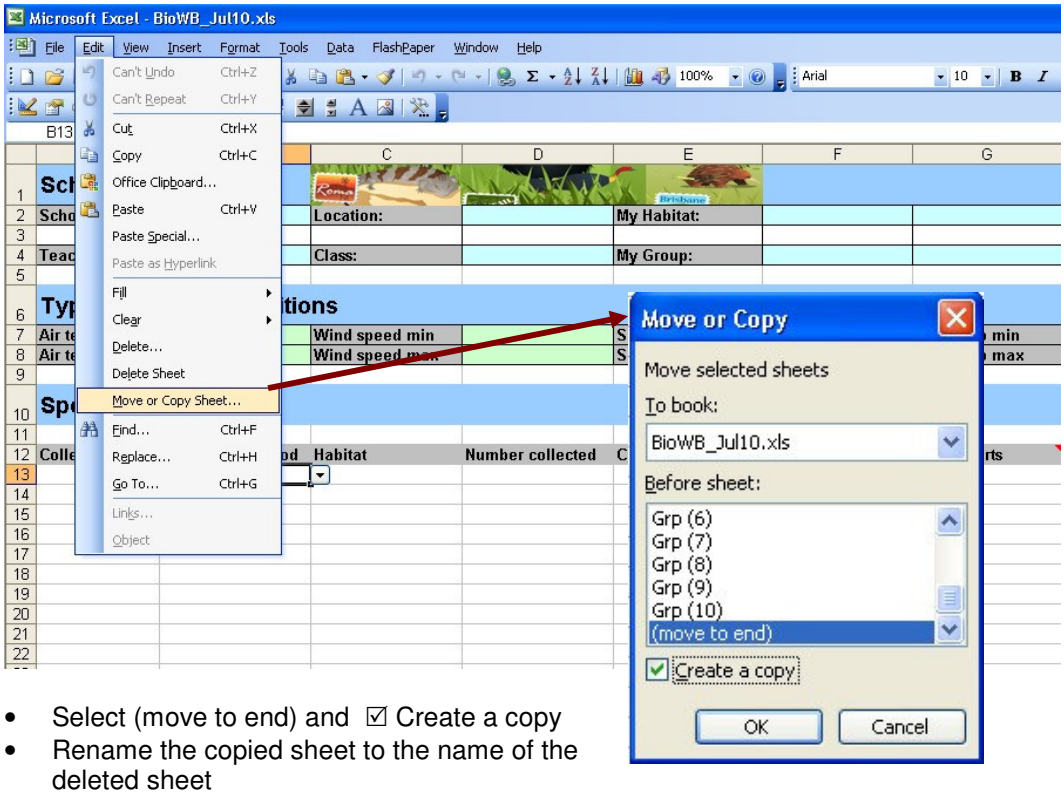
Note: Unless administrators have the expertise to perform the above functions they should not attempt to create additional copies. Contact the developer for assistance with these functions if required. Normally fresh data sheets can be created by clearing all contents on the group data sheet and clearing data using the forms on summary sheet.

Users: Administrators

- Administrators should only copy this sheet if required (trouble with Group sheet operation)
- Normally no user interaction is required.

Operation:

- Delete the offending sheet
- To copy a new sheet select Edit => Move or Copy Sheet



- Select (move to end) and ☑ Create a copy
- Rename the copied sheet to the name of the deleted sheet

Troubleshooting:

- See below for invalid reference error message details.

Grp() data sheets

Purpose:

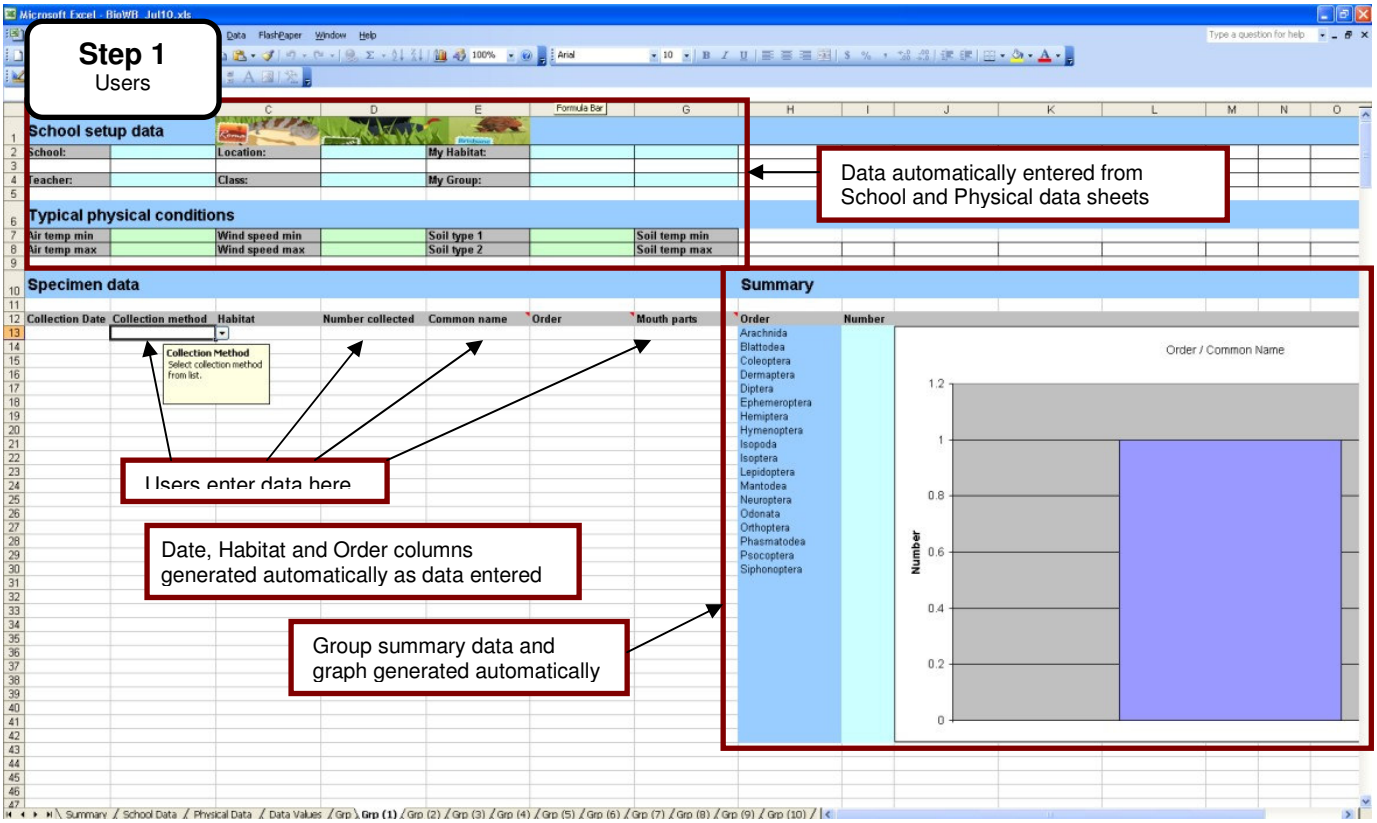
- To provide a **data entry sheet** for each group participating in the collection event.

Function:

- Data that is common to all data sheets is entered automatically as each new record is entered:
    - Date
    - Habitat
    - Order
- Data is entered by the user using *drop down boxes where provided:
    - Collection method*
    - Number collected
    - Common name*
    - Mouth parts* (Close observation required)
- Data is automatically:
    - Collated into a summary table on group data sheet
    - Generated into a graph on group data sheet
    - Harvested by the Summary sheet for collation
- Printing of data and summary graph is defaulted to 2 pages of landscape A4.

Users: User groups

- Groups who have collected the data.

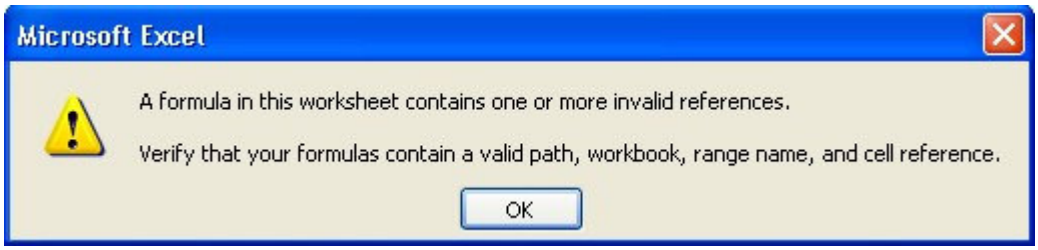


Step 2
Users

- Print data and graphs as 2 page printout of this group's data
- Save workbook to another location
- Analyse summary data sheet for whole group.

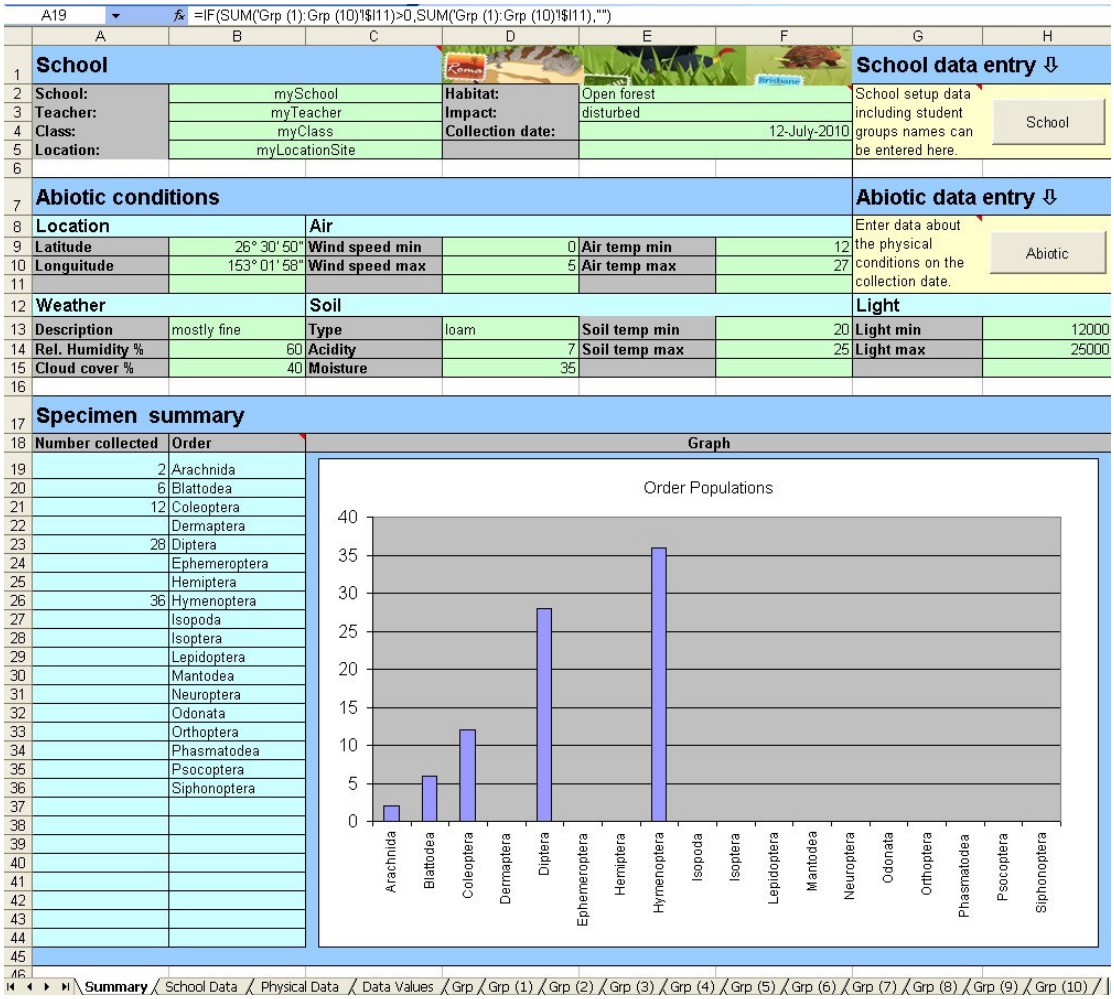
Troubleshooting:

- If required common names do not appear in the drop down boxes then editing (adding) will need to be done by the administrator in the Data Values sheet.
- Data error message: Invalid references


Microsoft Excel
A formula in this worksheet contains one or more invalid references.
Verify that your formulas contain a valid path, workbook, range name, and cell reference.
OK

  - Occurs due to some legacy range names that are initially blank or empty.
  - Select Ok and continue.
  - Should not reappear first record has been entered but may reappear if record contents are cleared or a new Grp sheet is copied to replace the existing sheet.

Summary sheet sample



Group data sample

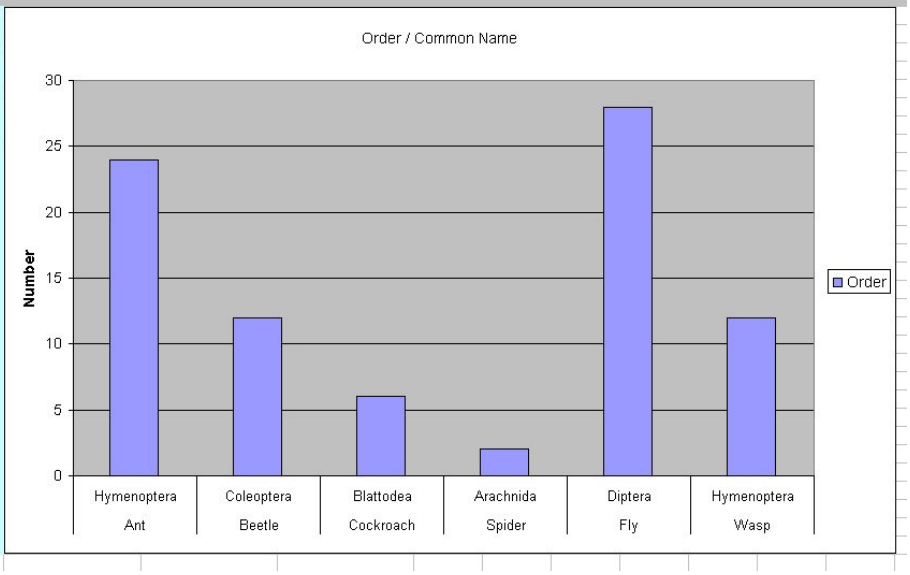
D17

	A	B	C	D	E	F	G
1	**School setup data**						
2	**School:**	mySchool	**Location:**	myLocationSite	**My Habitat:**	Open forest	
3	**Teacher:**	myTeacher	**Class:**	myClass	**My Group:**	myGroup1	
4							
5	**Typical physical conditions**						
6	**Air temp min**		**Wind speed min**		**Soil type**		**Soil temp min**
7	**Air temp max**		**Wind speed max**		**Soil pH**		**Soil temp max**
8							
9	**Specimen data**						
10	**Collection Date**	**Collection method**	**Habitat**	**Number collected**	**Common name**	**Order**	**Mouth parts**
11	12/07/2010	Pitfall trap	Open forest	24	Ant	Hymenoptera	
12	12/07/2010	Pitfall trap	Open forest	12	Beetle	Coleoptera	
13	12/07/2010	Pitfall trap	Open forest	6	Cockroach	Blattodea	
14	12/07/2010	Pitfall trap	Open forest	2	Spider	Arachnida	
15	12/07/2010	Malaise trap	Open forest	28	Fly	Diptera	
16	12/07/2010	Malaise trap	Open forest	12	Wasp	Hymenoptera	
17							

Number
Enter the total number collected of this type of organism.

Summary

Order	Number
Arachnida	2
Blattodea	6
Coleoptera	12
Dermaptera	
Diptera	28
Ephemeroptera	
Hemiptera	
Hymenoptera	36
Isopoda	
Isoptera	
Lepidoptera	
Mantodea	
Neuroptera	
Odonata	
Orthoptera	
Phasmatodea	
Psocoptera	
Siphonoptera	



Data flow diagram

Appendix